
Livestock Nutrient Management Program

Report to the Washington State Legislature
as required by RCW 90.64

Prepared by
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Executive Summary

On May 16, 2003 Governor Locke signed into law ESSB 5889 (Chapter 90.64 RCW), which establishes the new Livestock Nutrient Management Program (LNMP) within the Washington Department of Agriculture (WSDA). The program is to provide regulatory oversight and guidance to the livestock industry regarding their responsibilities under state and federal law, and to address recent federal rule changes, while protecting water quality and maintaining a healthy business climate for farming. The intent of the legislation is for a single Livestock Nutrient Management Program to be fully implemented by 2006.

The legislation required that a committee be formed and submit a report back to the appropriate legislative committees by December 2003, to include the results of the committee's evaluation and draft legislation to initiate the program. This report provides an update on the status of the LNMP and implementation of the new legislation.

Establishment of the LNMP Development and Oversight Committee (DOC)

To assist in the implementation of the new program at WSDA, the legislature provided for the appointment of a Program Development and Oversight Committee (DOC) to provide guidance to the Director of the Department of Agriculture. The committee consists of 16 members, of which the Governor appointed 10 members. Members will serve on the committee from July 1, 2003 to June 30, 2006. The members are representatives of:

- WSDA, who shall serve as committee chair;
- The Department of Ecology (Ecology);
- The United States Environmental Protection Agency (EPA);
- Commercial shellfish growers;
- An environmental interest organization with familiarity and expertise in water quality issues;
- Tribal governments as nominated by an organization representing tribal governments;
- Washington State University (WSU);
- The Washington association of conservation districts;
- Dairy producers;
- Beef cattle producers;
- Poultry producers;
- commercial cattle feedlots; and
- A regulated industry group chosen by the Director, (an egg producer was selected).

The primary responsibility of the DOC is to work with WSDA to develop a livestock nutrient management program that will meet the minimum requirements of the recently revised federal regulations for Animal Feeding Operations (AFO) and Concentrated Animal Feeding Operations (CAFO). The DOC is designated to establish a work plan that includes a list of tasks and a projected completion date for the tasks, establish subcommittees to address each of the major industry segments that is covered by the recently adopted AFO/CAFO federal regulations and assign due dates to report back to the full committee.

LNMP Development and Oversight Committee Progress

The DOC met for the first time Sept. 10 - 11, 2003. A second meeting was held Oct. 21, 2003. Four subcommittees were established in September and cover the following areas: Permitting, Technical Issues, Education and Communication, and Program Infrastructure. The DOC is in the evaluation and discussion phase of implementing the legislation. Therefore, this first report will provide the status of the program at WSDA, areas of strong committee agreement relating to developing the new program and the general direction of the committee.

The DOC determined that it was premature to submit legislative recommendations for the 2004 session and plans to fully evaluate program needs over the next year to provide recommendations for the 2005 session. This schedule will still meet the federal requirement for legislative changes to be in place by spring of 2005.

WSDA Livestock Nutrient Management Program Status

While the new program at WSDA is under development, the existing Dairy Nutrient Management Program (DNM) must continue to be administered and enforced. WSDA has been handling dairy registrations, and tracking DNM Plan approvals and certification since July 1, 2003. WSDA staff has also responded to all livestock complaints since July with the support and cooperation of Ecology staff.

The transfer of program enforcement responsibility from Ecology to WSDA became effective when the Memorandum of Understanding (MOU) between Ecology and WSDA was signed on Oct. 10, 2003. WSDA now has the state authority to carry out compliance activities with livestock facilities relating to any discharges to ground or surface water. The MOU also clarifies the roles and responsibilities of each agency and areas of cooperation.

Livestock Nutrient Management Program DOC Current Issues

The DOC will continue to meet regularly over the next year to evaluate these issues, advise WSDA on implementing the new program, and develop recommendations for the 2005 legislative session. The DOC is in strong agreement that success of an expanded livestock program includes the following:

- Continued representation and input from all stakeholder groups
- Keep livestock industries profitable
- Contribute to clean water
- Comply with minimum requirements of the federal law;
- Establish economic equity at the producer, industry, and state level;
- Generate sufficient resources and tools to do the job;
- Assure that WSDA is successful in gaining delegation from EPA;
- Create wider public awareness of farmer's contribution to clean water;
- Provide effective education and assistance so potential CAFO's can stay AFO's; and
- Create effective partnership among industry and agency groups.

History of Nutrient Management Program

The Washington state legislature established a dairy waste management program at the Department of Ecology (Ecology) in 1993 that consisted of complaint driven inspections. The purpose of this program was to prevent the degradation of surface and ground waters. The program changed dramatically in 1998 with the passage of the Dairy Nutrient Management Act (Chapter 90.64 RCW), to include regular inspections, and required all dairies to develop and implement nutrient management plans by Dec. 31, 2003.

A Dairy Nutrient Management Plan (DNMP) describes how to manage manure process water from a dairy operation. In most cases, these nutrient rich materials will be applied to pasture and hay lands. When applied to land, the DNMP will identify when growing plants will be able to capture and use the nutrients for plant growth. The plan also identifies times and weather conditions when land application of these nutrients could pollute surface or groundwater. The final step is certification of the DNMP. This is a two-part process in which:

- The local conservation district certifies that the practices necessary to manage the byproduct nutrients from the dairy operation have been properly installed; and
- The dairy producer certifies that he or she is managing the nutrients as described in the DNMP.

State funding was authorized to provide technical assistance and cost share to dairies through the Washington State Conservation Commission and the locally controlled conservation districts. A Dairy Nutrient Management Task Force was created to provide guidance to the program. The state program applied to all licensed dairies, even those that did not meet the federal definition of a Concentrated Animal Feeding Operation.

Great progress has been made with several watersheds showing marked decreases in bacteria levels due to work by the dairies and staff from Ecology, the districts, and Natural Resources Conservation Service (NRCS). Most notable of these are the Granger Drain in the Yakima basin, the Nooksack River, and the reopening of some of the shellfish beds in Portage Bay.

Ecology issued a Dairy General-National Pollution Discharge Elimination System Permit (NPDES) in 1996, and revised and reissued the current one in March 2000. This permit, which covers all permitted dairies, will expire March 31, 2005. At that time, an updated permit will need to be developed and issued that will be available to dairies in need of a permit. At this time, the current permit covers one sixth of the states dairies. Due to changes in the federal rule, up to one hundred more may need to be covered in the future.

Non-dairy CAFO's are currently covered by individual NPDES permits. These permits are good for five years and have differing expirations dates. While they will have to apply for a new permit prior to expiration of their individual permits, Ecology will hold those applications until an updated general permit can be developed consistent with the new federal rules and state program. There are currently 14 permitted facilities, with one horsetrack and the rest cattle feedlots. Estimates on the numbers of additional non-dairy facilities that may need to be covered under the CAFO rules range from 35 to hundreds. While the number and locations of dairies is easily determined through state

licensing and the registration required under the Dairy Nutrient Management Act, the number and locations of other potential CAFO facilities is not readily determined.

During the fall of 2002, proposed state budget cuts included elimination of the dairy program at Ecology. Funding for a reduced program was eventually authorized and in the process, the program was transferred from Ecology to WSDA. Legislation authorizing the transfer, ESSB 5889, also directed WSDA to establish a broader livestock program to address new federal requirements. An oversight and development committee was established through 2006 to guide the agency in developing and running the program.

In February of 2003, the Environmental Protection Agency (EPA) adopted major revisions to the rules under the Clean Water Act (CWA) addressing Animal Feeding Operations (AFO) and Concentrated Animal Feeding Operations (CAFO). By definition, CAFO's are currently considered a point source under the CWA and are required to have NPDES permit. In addition, as with other agricultural activities, no discharge of pollutants is allowed so while the permit establishes compliance requirements it does not authorize discharge from the facility except certain storm events.

The new CAFO rules went into effect in April of 2003. The major changes in the rules include: 1) adding dry litter poultry and housed hog operations to the CAFO definition; 2) expanding nutrient management plans to cover phosphorus where needed; 3) requiring minimum buffers between manure application areas and water ways; 4) increased record keeping; and 5) annual reporting to the responsible agency.

States that will require legislative action to update their CAFO programs have until April of 2005 to get their programs developed. Existing CAFO facilities have until April of 2006 to apply for their new permits and December of 2006 to fully implement their new nutrient management plans.

The updated state CAFO program will need to specify technical standards to be used in the state program, create a process for developing plans and certifying plans or planners, create a process to evaluate the use of alternative designs and practices, develop and issue new general permits for livestock operations, and establish criteria for designating small sized facilities as CAFO's to be brought under permit. In addition, it is clear that work will be needed with dairy and non-dairy industry groups to identify and educate potential CAFO producers and include them in program development.

Current Status of Program Development

Transition from Ecology to WSDA

WSDA became responsible for the Livestock Nutrient Management Program on July 1, 2003. WSDA staff had already begun working with Ecology on an MOU and transition issues. An acting inspector with WSDA was provided initial orientation by Ecology field staff and helped evaluate the fall conditions of lagoons in the Whatcom and Skagit county areas. So far, WSDA has responded to complaints, making 13 site inspections, with 1 notice of violation issued to date. WSDA has continued to track registrations, plan approvals, and certifications. Ecology has provided some training to staff and will be providing additional training regarding data management, the CWA, and enforcement procedures.

A program manager was hired in August, a secretary administrator in October and the three funded inspector positions should be filled by mid December. The MOU between WSDA and Ecology was signed on October 10, 2003. At that time, WSDA became authorized to enforce discharge violations by livestock operations under the authority of the state Pollution Control Act, Chapter 90.48 RCW.

Because the federal Clean Water Act authority to issue NPDES permits cannot be changed by a state action, Ecology will continue to be responsible for issuing CAFO permits and developing new permits to meet the new federal requirements. The MOU gives July, 2005 as the target date for WSDA to apply for delegation authority from EPA for the CAFO program. WSDA and the DOC will be working closely with Ecology and EPA to ensure that the CAFO program will meet the delegation approval requirements.

WSDA staff will do inspections and compliance work for all dairies, for AFO's and for CAFO's. Under Chapter 90.48 RCW, enforcement appeals are taken to the Pollution Control Hearings Board (PCHB). However, the existing enforcement procedures at WSDA do not include taking cases to the Board. Consequently, Emergency Rules were adopted in coordination with the PCHB to allow WSDA to take cases to the PCHB for review and acceptance. The permanent rule is currently in the public review process.

Finally, there was initially some uncertainty within the industry groups on who would be responsible for water quality issues related to pasture based grazing operations. Because only dairies AFO's and CAFO's were transferred to WSDA, pasture based operations will remain the responsibility of Ecology at this time.

Livestock Development and Oversight Committee (DOC)

The Livestock Development and Oversight Committee met for the first time Sept. 10 - 11, 2003. Besides the committee members, another 20 people participated. A second meeting was held Oct. 21, 2003 with 10 additional participants.

Four subcommittees were established in September and cover the following areas:

- **Permitting** - The permitting subcommittee is chaired by Ecology and will be heavily involved in their process to develop the updated NPDES permit(s) by the spring of 2005.
- **Technical Issues** - The technical subcommittee is chaired by WSU Extension and is working on old and new technical issues as well as process issues.
- **Education and Communication** - The education and communication subcommittee is co-chaired by representatives from the WA Assoc. of Conservation Districts and the dairy industry. As part of their work they will be coordinating with the Conservation Commission regarding the use of the current supplemental budget request for CAFO educational funds.
- **Program Infrastructure** - The infrastructure committee is co-chaired by EPA and the environmental representative. They will be keyed on issues related program resources and to getting delegation approval from EPA.

The subcommittees have all met at least once during regular DOC meetings and met again on Nov. 19 and 20, 2003. Committee members chair the subcommittees, but non-members are invited to join the subcommittees to ensure good representation and exchange of ideas. The subcommittees will make recommendations to the full DOC, which will then make any necessary decisions and forward recommendations on to the Director.

While there has been no tribal participation at this point, the committee will provide information regularly to the Northwest Indian Fish Commission as well as the official representative in order to maintain communications.

Existing Dairy Nutrient Program

The dairy program continues forward with the Dec. 31, 2003 deadline for full implementation of each dairy's nutrient management plan approaching rapidly. Every dairy certified by Dec. 31, 2003 receives a tax exemption for purchases necessary to maintain their plan. Over half of the dairies are currently certified as fully implemented. According to information gathered by the Conservation Districts, nearly 90% are expecting to be certified as fully implemented by the deadline.

Some of the remaining dairies have or will be appealing to the Conservation Commission for time extensions. The Commission has an informal appeal process required in the Dairy Nutrient Management Act. The appeal panel will make recommendations to WSDA on how to handle those particular cases. WSDA will make the final determination on whether a dairy is penalized for failure to meet the deadline, or what new deadline will apply.

Findings of Development and Oversight Committee

Development and Oversight Committee (DOC) Timelines

The DOC has determined that there is no need for immediate legislative action in order for the current dairy program to be fully implemented by WSDA. Legislative action is also not needed to support work by the DOC or WSDA to develop the larger program. Consequently, they have determined not to submit any legislative proposals for the 2004 session. Instead they will concentrate on developing a comprehensive program and address legislative changes needed to support delegation and to establish a broader program during the 2005 legislative session.

Because statutory changes will be needed to revise the state's NPDES CAFO program, Washington has until April 13, 2005 to have the program revisions in place. Waiting to take legislative action during the spring of 2005 may extend final program development beyond the April, 2005 date required in the CAFO rule. However, we anticipate that WSDA and the DOC will be able to show EPA that they have been making steady progress towards establishing a successful program.

Targeting 2005 for any budget requests also makes sense. It will take some time for the livestock program to be fully functional at WSDA and show what can be accomplished with the existing resources. The current supplemental budget request by the Conservation Commission for education and technical assistance funds does address a widely recognized current need. By the time the funds are available, the DOC should have a good idea of how best to use them and expects to have good coordination with the Commission and Districts on implementation. Other broader program needs should be identified during the next year.

Permits and Plan Requirements

To meet the new federal requirements, the dairy nutrient management plans for permitted facilities will need to be reassessed to include phosphorus. Phosphorus management is still relatively new and will take some time for both technicians and dairy operators to plan for and carry out. Additional record keeping, including tracking certain maintenance activity will also take some adjustment time. A more important issue specifically for the dairy industry is whether all dairies will be required to meet the CAFO requirements or only permitted dairies. The DOC has not reached a conclusion on this question. However, there is strong agreement at this point that the overall state program should not go beyond the minimum federal requirements.

As mentioned earlier in this report, the new dairy general permit needs to be developed by the spring of 2005. As that permit is revisited, the permit requirements for other industry types will be evaluated and the possibility of encompassing all CAFO's under one general permit will be pursued. Based on other states' experiences, one permit may work effectively although some states have issued a general poultry permit separate from the other CAFO types.

Technical Standards and Processes

The current dairy program relies on NRCS practice standards in developing the nutrient management plans. One benefit of using NRCS standards is that users are eligible for EQIP funds. Another is that the standards are well known and accepted as effective 'best management practices'. A disadvantage of using only NRCS standards is that there can be a lack of flexibility to adjust to site-specific conditions. This has led to difficulties for some operators who feel that effective alternatives exist that are more affordable. The committee is pursuing possibilities for working more cooperatively with the NRCS to review and potentially revise some practice standards.

Another solution, as recognized by the federal rule, is identifying appropriate criteria and a process to ensure that alternate practices are at least as effective as the NRCS standards. However, an operator using alternate practices will not be eligible for Environmental Quality Incentive Program (EQIP) funding although they may be able to use state funds if available.

The technical subcommittee is exploring these issues along with planning tools that may assist operators and technical experts in more efficiently developing plans. They will be discussing the relative merits of certifying planners, plans themselves or both. They will also look at research needs and provide advice on use of the livestock penalty account funds. More time is needed for well-reasoned conclusions to be reached on these complex issues.

Communication and Education

The importance of communication with the industries and potential CAFO's is recognized. It is a high priority for the DOC that operators are properly and clearly informed about the regulations, the program and how operators can comply with or stay out of the CAFO category whenever possible. The key elements for success are clear and straightforward messages, multiple avenues for reaching people, and easily accessed resources for assistance.

Knowing more about the population of potential CAFO facilities and the issues relating to water quality that they face will be an important part of a communication and education program. Good cooperation among the industry groups and resource agencies will also be a critical component for success.

Communication to the general public is also seen as an important element to address. Key messages for the public would relate to progress of the program at WSDA, accomplishments of producers and resulting water quality improvements.

Program Resources and Funding

Understanding who is affected in the regulated community by the nutrient management program is important for successful communication. Determining the size of that community is also imperative. The numbers of facilities, their general distribution across the state, and the types of issues that need to be dealt with, all need to be identified as the program is developed. This will drive the type of resources most needed and where they need to be available.

Matching the program responsibilities and the resources needed to carry them out with the available state and WSDA resources will be critical in meeting EPA's expectations for a successful state program. It will be a major milestone for WSDA to receive delegation of CWA authority for the AFO/CAFO program from EPA.

Organizational Relationships

Besides working closely with the groups represented on the DOC, the committee has identified several other organizations that will be important to work with. First the NRCS is a key player regarding technical issues and assistance and Farm Bill related funding sources. The committee recognizes the need to develop better communication with the NRCS and find constructive ways to work with them. The NRCS program regarding Technical Service Providers (TSPs) will affect private consultants as well as Conservation District staff. Integrating this federal element into the state service delivery system will be important as well.

Second, the Farm Bureau could be useful in helping the program reach producers that are not members of specific industry groups. This will be important not only to get information out to them, but also to hear their issues, concerns, situations, and ideas that need to be considered. Their organizational resources may also prove to be helpful as the program develops. In Utah, the Bureau is an active partner in the organization and implementation of the state's CAFO program.

The horse industry in the state is not represented on the DOC but does have many thousands of animals, many of which may indeed be small or medium CAFO's if not properly managed. This group needs to be included more directly in the program development process.

EPA holds a unique position on the DOC. As a member, they bring a wealth of crucial information, background, and advice for the CAFO program. However, due to their role in ultimately approving the change in CWA delegation from Ecology to WSDA, they will have a very direct voice in the development of the CAFO program for the state. The committee recognizes the need to work closely with EPA to retain a constructive relationship, as program recommendations are prepared for the Director.

The committee anticipates a very close working relationship with Ecology staff as well. As with EPA, Ecology staff has a wealth of experience in CAFO, clean water, and permit issues. Ecology also has the advantage of having worked closely with EPA over time and can provide useful guidance on their experiences with EPA programs and operations.

Finally, the Conservation Commission is not directly a member of the committee but does hold an important role as the conduit for state funding to the Conservation Districts for helping to implement the state CAFO program. Their leadership with the Districts will be helpful as the DOC works out the program structure, delivery and funding.

Legislation and Rules

There are a number of issues related to legislation and rule development that need to be addressed. It is clear that language changes need to be made to the law for internal consistency as a livestock program, not just a dairy program. The committee has also had preliminary discussions about expanding the specific dairy program requirements in Chapter 90.64 RCW to incorporate the final CAFO program.

As an alternative, the committee has also discussed establishing the basic program framework in Chapter 90.64 RCW, but putting the program details into rules. Retaining the program at the legislative level may provide better certainty over what it is and how it will be carried out, but that also makes it less flexible to address new situations efficiently. Relying on rules to carry out the details of the program can provide greater flexibility over time but may end up with less predictability for the industry. A conclusion has not yet been reached.

EPA has made it clear that in order for WSDA to ultimately receive CWA delegation, Chapter 90.48 RCW must be amended to directly authorize WSDA to be the Clean Water Act authority for the CAFO program. Reliance on the MOU with Ecology to provide state authority will work for now, but is insufficient for the federal authority change. The language to do this will need to be worked out with Ecology, EPA, and WSDA.

Delegation Requirements

In addition to the change in Chapter 90.48 RCW, there will be other work necessary to meet the delegation requirements. EPA recently sent Oregon a packet of information, guidance, and examples for submitting an application for delegation of their CAFO program. Their state program is now in place and they will be moving forward with their application. We will stay in touch with Oregon Department of Agriculture staff as they go through the process to be better prepared. We received the same packet of material from EPA and will be referring to it over the course of program development.

Recommendations of Development and Oversight Committee

The committee has decided to concentrate on developing a comprehensive legislative and budget package for the 2005 legislative session. Consequently, no legislative proposal will be presented at this time.

However, the committee does offer this list of goals for a successful livestock program. These will guide the discussions and decision making of the committee as they work on developing the program during the next year. This will also guide assessment of implementation of the program once it is established.

- Keep livestock industries profitable;
- Contribute to clean water ;
- Comply with minimum requirements of the federal law;
- Establish economic equity at the producer, industry and state level;
- Generate sufficient resources and tools to do the job;
- Assure that WSDA is successful in gaining delegation from EPA;
- Create wider public awareness of farmer's contribution to clean water;
- Provide effective education and assistance so potential CAFO's can stay AFO's; and
- Create effective partnership among industry and agency groups.

In addition, the committee also has these expectations for the program:

- Producers are proactive in supporting program and communicating to peers;
- Program is flexible and responds to changing conditions;
- Program provides clear guidance and good communication;
- Program includes effective system to deal with technical issues;
- Program is managed to be efficient, effective and dependable; and
- Success measures are identified, tracked and communicated.

DOC Preliminary Work Schedule:

November '03 – January '04

- Sub-committees work on issues and identify elements that may need legislation

January '03 – February '04

- DOC determines legislative issues to develop key program elements
- Dairy general permit revision process begins

March '04 – April '04

- DOC and sub-committees develop legislative proposals.

April '04

- Draft legislation to Director for review and consideration.

May '04 – October '04

- Draft legislation reworked as needed.
- Program elements refined.
- Scope of potential rules identified.

July '04

- Draft of dairy general permit completed.
- Potential for draft of CAFO general permit.

August '04

- Permitted dairies must apply for coverage for the updated permit (180 days prior to permit expiration).

October '04

- Final legislation submitted to OFM.
- Draft framework for related rules begun.

March '05

- Dairy (CAFO) general permit(s) finalized and issued.

April '05

- Final state CAFO legislation adopted, funding levels for affected agencies set
- Any necessary rules drafted for review.

June '05

- Submit application package to EPA for CWA delegation.

Appendices

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